

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claim 1 (currently amended) An electronic switching module that can directly be mounted instead of an electromagnetic DC relay used in various vehicles without any modifications; which consists of; the electronic switching module comprising a plastic casing (1) protecting said electronic switching module against the external environmental conditions, an electronic circuit including a drive circuit (7); a semiconductor switch in the form of discrete transistor (3); and a printed circuit card (4) on which the electronic circuit elements are arranged; an aluminum block (2) closing the periphery of the electronic circuit and preventing over-heating of the electronic circuit, a semiconductor switching element transistor (3), a printed circuit card (4) on which the electronic circuit elements are arranged; a cover (5) wherein said printed circuit card (4) is placed and the contacts (6) that are mounted to the cover (5) to provide the connection to the power circuit.

Claim 2 (currently amended) ~~An~~ The electronic switching module according to claim 1, characterized with ~~wherein the~~ plastic casing (1) is provided with a row of perforations, to allow heat transfer.

Claim 3 (currently amended) ~~An~~ The electronic switching module according to

~~claims~~claim 1 and 2, characterized with, wherein the aluminum block (2) is a prismatic ~~aluminum~~aluminum block (2) with fins provided on it, in order to transfer to outside the heat created in the circuit more rapidly.

Claim 4 (currently amended) ~~An The~~ electronic switching module according to ~~claims~~claim 1 to 3, characterized with, wherein the contacts (6) ~~are~~ adapted to be placed in the contact guides of the previously used electromagnetic relay, without requiring any modifications.

Claim 5 (currently amended) ~~An The~~ electronic switching module according to ~~claims~~claim 1 to 4, characterized with an, wherein the electronic circuit ~~consisting of a~~ comprises the drive circuit (7) comprising a triggering DC source (8); a resistance (R₁₀), a LO (14), a diode (Q₁₀) and a second resistance (R₁₁) all connected in series to said source and a capacitor (C₁₀) connected in parallel to all these, and a chassis (frame) (13); a transistor (3) which is connected to the drive circuit (7) from its inlet (gate) end (9); a resistance (R₁₂), the DC source (drain) (10) end of the transistor (3) of which is connected to the source (11) end of the transistor; and a load (L₁₀).

Claim 6 (currently amended) ~~An The~~ electronic switching module according to ~~claims~~claim 1 to 4, characterized with an, wherein the electronic circuit ~~consisting of a~~ comprises the drive circuit (7) comprising a resistance (R₂₀) connected in series to a triggering DC source, a transistor (T₂₀) and diode (Q₂₀) connected to each other in

parallel which are in turn connected to said resistance in series, a frame (13) connecting them to the ground and a diode (Q₂₁) connected in series to them; a diode (Q₂₂), a transistor (10) and a resistance (R₂₁) connected to each other in parallel which are in turn connected to said driving circuit (7) in series, a triggering DC source (8) feeding said circuit and a diode (Q₂₃) and a load (L₂₀) connected to each other in parallel, which connect them to the frame (13).

Claim 7 (currently amended) ~~An The~~ electronic switching module according to ~~claims~~claim 1 to 4, ~~characterized with an, wherein the~~ electronic circuit ~~consisting of~~ comprises a transistor (10) and two resistances (R₃₁,R₃₂) connected to each other in parallel which are in turn connected to said resistance, and a frame (13) which connects the above components to the ground.

Claim 8 (currently amended) ~~An The~~ electronic switching module according to ~~claims~~claim 1 to 7, ~~characterized with a, wherein the~~ printed circuit card (4) ~~comprising~~ comprises an electronic circuit wherein more than one LO and more than one simultaneously operating transistor, are used in order to obtain higher current values in the power circuit.

Claim 9 (currently amended) ~~An The~~ electronic switching module according to ~~claims~~claim 1 to 8, ~~characterized with an, wherein the~~ electronic circuit ~~comprising~~ comprises a single drive circuit including simultaneously operating LO's and more than

one power circuit activated by being connected in parallel, wherein said module is used as a switch.

Claim 10 (currently amended) An electronic switching module characterized with an electronic circuit comprising a resistance connected in parallel to the load existing the transistor, wherein said module is used as a fuse by providing control on the current, that can directly be mounted instead of an electromagnetic DC relay used in various vehicles; the electronic switching module comprising a plastic casing (1) protecting said electronic switching module against the external environmental conditions and wherein the plastic casing (1) is provided with a row of perforations to allow heat transfer, an electronic circuit including a drive circuit (7); a semiconductor switch in the form of discrete transistor (3); and a printed circuit card (4) on which the electronic circuit elements are arranged; an aluminum block (2) closing the periphery of the electronic circuit and preventing over-heating of the electronic circuit, a cover (5) wherein said printed circuit card (4) is placed and contacts (6) that are mounted to the cover (5) to provide the connection to the power circuit.

Claim 11 (new) The electronic switching module according to claim 10, wherein the aluminum block (2) is a prismatic aluminum block with fins provided on it, in order to transfer to outside the heat created in the circuit more rapidly.

Claim 12 (new) The electronic switching module according to claim 10, wherein the

contacts (6) are adapted to be placed in the contact guides of the previously used electromagnetic relay, without requiring any modifications.

Claim 13 (new) The electronic switching module according to claim 10, wherein the electronic circuit comprises the drive circuit (7) comprising a triggering DC source (8); a resistance (R₁₀), a LO (14), a diode (O₁₀) and a second resistance (R₁₁) all connected in series to said source and a capacitor (C₁₀) connected in parallel to all these, and a chassis (frame) (13); a transistor (3) which is connected to the drive circuit (7) from its inlet (gate) end (9); a resistance (R₁₂), the DC source (drain) (10) end of the transistor (3) of which is connected to the source (11) end of the transistor; and a load (L₁₀).

Claim 14 (new) The electronic switching module according to claim 10, wherein the electronic circuit comprises the drive circuit (7) comprising a resistance (R₂₀) connected in series to a triggering DC source, a transistor (T₂₀) and diode (O₂₀) connected to each other in parallel which are in turn connected to said resistance in series, a frame (13) connecting them to the ground and a diode (O₂₁) connected in series to them; a diode (O₂₂), a transistor (10) and a resistance (R₂₁) connected to each other in parallel which are in turn connected to said driving circuit (7) in series, a triggering DC source (8) feeding said circuit and a diode (O₂₃) and a load (L₂₀) connected to each other in parallel, which connect them to the frame (13).

Claim 15 (new) The electronic switching module according to claim 10, wherein the electronic circuit comprises a transistor (10) and two resistances (R₃₁,R₃₂) connected to each other in parallel which are in turn connected to said resistance, and a frame (13) which connects the above components to the ground.

Claim 16 (new) The electronic switching module according to claim 10, wherein the printed circuit card (4) comprises an electronic circuit wherein more than one LO and more than one simultaneously operating transistor, are used in order to obtain higher current values in the power circuit.

Claim 17 (new) The electronic switching module according to claim 10, wherein the electronic circuit comprises a single drive circuit including simultaneously operating LO's and more than one power circuit activated by being connected in parallel, wherein said module is used as a switch.

Claim 18 (new) An electronic switching module that can directly be mounted instead of an electromagnetic DC relay used in various vehicles; the electronic switching module comprising a plastic casing (1) protecting said electronic switching module against the external environmental conditions and wherein the plastic casing (1) is provided with a row of perforations to allow heat transfer, an electronic circuit including a drive circuit (7); a semiconductor switch in the form of discrete transistor (3); and a printed circuit card (4) on which the electronic circuit elements are arranged; an aluminum block (2)

closing the periphery of the electronic circuit and preventing over-heating of the electronic circuit and wherein the aluminum block (2) is a prismatic aluminum block with fins provided on it, in order to transfer to outside the heat created in the circuit more rapidly, a cover (5) wherein said printed circuit card (4) is placed and contacts (6) that are mounted to the cover (5) to provide the connection to the power circuit.

Claim 19 (new) The electronic switching module according to claim 18, wherein the contacts (6) are adapted to be placed in the contact guides of the previously used electromagnetic relay, without requiring any modifications.

Claim 20 (new) The electronic switching module according to claim 18, wherein the electronic circuit comprises the drive circuit (7) comprising a triggering DC source (8); a resistance (R₁₀), a LO (14), a diode (Q₁₀) and a second resistance (R₁₁) all connected in series to said source and a capacitor (C₁₀) connected in parallel to all these, and a chassis (frame) (13); a transistor (3) which is connected to the drive circuit (7) from its inlet (gate) end (9); a resistance (R₁₂), the DC source (drain) (10) end of the transistor (3) of which is connected to the source (11) end of the transistor; and a load (L₁₀).